PETE WILSON, Governor

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY

DEPARTMENT OF TRANSPORTATION

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Docket Clerk U.S. DOT Dockets Room PL-401 400 Seventh Street SW Washington DC 20590-0001

Comments on Development of Performance Measures for SUBJECT: FHWA's Strategic Plan

Enclosed is a table showing performance measures and data needs for person movement and freight movement, that was developed for the California Department of Transportation's Intermodal Transportation Management System (ITMS). We are offering them as suggestions to assist in developing performance measures for the proposed FHWA Strategic Plan. For each measure, the formula to derive the measure, as well as modal data needed is shown.

Thank you for the opportunity to comment. Please keep us advised as the FHWA Strategic Plan and its performance measures is further developed.

Sincerely,

RICHARD A. NORDAHL, Chief Goods Movement Analysis Branch

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Enclosures LJohnson:LBj



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CALTRANS ITMS

ITMS PERFORMANCE INDICATORS (1 of 4)

Performance Measures and Data Needs

					Data Needed b	Data Needed by Moda Source a		
aloup			Highway	Non-Motorized	Λir	Rail	Water	Transit
Mobility	Mobility	PMT//MT x Avg. Speed	Vehides, distance, Speed, Occupancy	Vehicles, distance, Speed, Occupancy	Vehicles, distance, Speed, Occupancy	Vehicles, distance, Speed, Occupancy	Vehicles, distance, Speed, Occupancy	Vehicles, distance, Speed, Occupancy
	Level of Service Link	Demand / Capacity	Highway demand, lanes	bke demand, ≇lanes	N/A	track v, #tracks	N/A	Passengers Seats
	Lost Time	Actual time - Theoretical time	Actual Speeds, Posted speeds	N/A	N/A	Free Flow travel time, actual travel time	N/A	Actual Speeds, Posted speeds
Financial	Cost to Service Provider	Capital Costs + (Useful Life Annual Operating) / miles	Maint., repair, Nability, capital, operating, depreciation	Maint, repair, lability, capital, operating, depredation	Fuel, Maint., repair, liability, captal, coptal, operating, depreciation	Fuel, Maint., repair, liability, capital, operating, depreciation	Fuel, Maint., repair, liability, capital, operating, depreciation	Fuel, Maint., repair, liability, capital, operating, depreciation
	User costs	User costs / person miles	tuel, insurance, repairs, maint., capital, depreciation	injuries, repairs, maint., capital, depredation	Fares	Fares	Farios	Fares
Environmental Pollution	Pollution	pollution / person miles	Pollutants, distance, persons	Pollutants, distance, persons	Pollutants, distance, persons	Pollutants, distance, persons	Pollutants, distance, persons	Pollutants, distance, persons
	Green House Emissions	CO2 / person miles	CO2 / person miles	CO2 / person miles	CO2 / person miles	CO2 / person miles	CO2 / person miles	CO2 / person miles
	Fuel con- sumption	fuel / person miles	fuel / person miles	fuel / person miles	fuel / person miles	tuel / person miles	fuel / person miles	fuel / person miles

· N/A - Not Applicable

ITMS PERFORMANCE INDICATORS (2 of 4)

Performance Measures and Data Needs

	Performance Measure Group	Measure	Formulate of the Chief			Jána Needed B	Data Needed by Jodai Softes		
supported per Gapital Costs - Employment expenditures, expenditures, expenditures, spenditures, spenditures, expenditures, spenditures, expenditures, expenditures, expenditures, capital costs, capital				Highway	Non- Motorized	Air	Rell	Water	Transit
GSP Impacts Capital Costs Cost of Multiplier capital costs acpanditures, expanditures, capital costs, accidents, accidents, ectual speed, ectual ectual speed, ectual speed, ectual ectual speed, ectual ectual speed, ectual ectual speed, ectual ectu	Economic	Avg. Jobs supported per year	Capital Costs . Useful Life Annual + Operating . Costs	operating expenditures, capital costs, useful life, employment multipliers	operating expenditures, capital costs, useful iffe, employment	operating expenditures, capital costs, useful ife, employment	operating expenditures, capital costs, useful iffe, employment	operating expenditures, capital costs, useful iffe, employment multipliers	operating expenditures, capital costs, useful life, employment muttipliers
Cost of politulon, accidents, tatalities and actual speed,		GSP Impacts	• •	operating expenditures, capital costs, useful iffe, GSP multipliers	operating expenditures, capital costs, useful iffe, GSP multipilers	operating expenditures, capital costs, useful Iffe, GSP	operating expenditures, capital costs, useful life, GSP multipilers	operating expenditures, capital costs, GSP multipliers	operating expenditures, capital costs, useful iffe, GSP multipliers
Accidents at Accidents / person miles crossings Accidents at Accidents per person crossing Accidents, Accidents, M/A major intermodal crossings crossings crossings Consings		Cost of politribon, accidents, fatalities and lost time per person mile		Avg wage; posted speed, actual speed, PMT, accidents, fatalities; cost/actident; cost of air pollution, person miles	Avg wage; posted speed, actual speed, PMT, accidents, fatalities; cost/accident; cost/atality & cost of air politrion, person miles	Avg wage; posted speed, actual speed, PMT, accidents, fatalities; cost/atality & cost of air pollution, person miles	Avg wage; posted speed, actual speed, PMT, accidents, fatalities; cost/accident; cost/atality & cost of air politrion, person miles	Avg wage; posted speed, actual speed, PMT, accidents, fatalities; cost/accident; cost/atality & cost of air pollution, person miles	Avg wage; posted speed, actual speed, PMT, accidents, fatalities; cost/fatality cost/fatality & cost of air pollution, person miles
Accidents at Accidents per person crossing Accidents, Accidents, N/A major person person person intermodal crossings crossings Availability	Safety	Accidents at major intermodal crossings	Accidents / person mile	Accidents, person miles	Accidents, person miles	Accidents, person miles	Accidents, person miles	Accidents, person miles	Accidents, person miles
Availability Frequency model choice		Accidents at major intermodal crossings	Accidents per person crossing	Accidents, person crossings	Accidents, person crossings	N/A	Accidents, person crossings	N/A	Accidents, person crossings
	Quality of Life					Frequency modal choice	Frequency modal choice	Frequency modal choice	Frequency modal choice

* N/A - Not Applicable

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ITMS PERFORMANCE INDICATORS (3 of 4)

Performance Measures and Data Needs

Medalin is Medalin is Group	Madding			THE STATE OF	AND BY LOST	(34)[98]	
			Highway	Pipeline	Aħ	Rati	Water
Mobility	Mobility Index	Ton Miles/VMT x Average Speed Container Equivalents / VMTx Average Speed	Volume, Ton Miles Speed, Containers	Volume, Ton Miles Speed, Containers	Volume, Ton Miles Speed, Containers	Volume, Ton Miles Speed, Containers	Volume, Ton Miles Speed, Containers
	Lost Time	Actual time - Theoretical time	Actual Speeds, Posted speeds	N/A	N/A	Theoretical travel time, actual travel time	N/A
	V/C Ratio	Demand / Capacity	Highway demand & capacity	N/A			
Financial	Cost to Service Providers	AEC / Ton mile	Basis, Depreciation, Interest, Iffe expectancy, operating costs, capital costs,	Basis, Deprectation, Interest, life expectancy, operating costs, capital costs,	Basis, Depreciation, Interest, Ille expectancy, operating costs, capital costs, ton miles	Basis, Depreciation, Interest, IRe expectancy, operating costs, capital costs, ton miles	Basis, Depreciation, Interest, life expectancy, operating costs, capital costs,
	User Cost	Average cost / Ton Mile	Fuel, operator, maintenance costs	Fuel, operator, maintenance costs	Fuel, operator, maintenance costs	Fuel, operator, maintenance costs	Fuel, operator, maintenance costs
Environmental Pollution	Pollution	Pollution / ton mile	HC, CO, NOX, PM10, ton miles	HC, CO, NOX, PM10, ton miles	HC, CO, NOX, PM10, ton miles	HC, CO, NOX, PM10, ton miles	HC, CO, NOX, PM10, tons miles
	Fuel Consumption	fuel consumed / ton mile	Fuel consumed, ton miles	Fuel consumed, ton miles	Fuel consumed, ton miles	Fuel consumed, ton miles	Fuel consumed, ton miles
	Green House Emissions	CO ₂ / ton miles	CO2 / ton miles	CO ₂ / ton miles	CO2 / fon miles	CO ₂ / ton miles	CO2 / fon miles
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ITMS PERFORMANCE INDICATORS (4 of 4)

Performance Measures and Data Needs

Medialine Group			High	Highway	Delli Ni Pipeline	Ale by Mostal	Sölir-s Rall	Water
Economia	Avg. Jobs supported per year	Cacital Costs • Emp Useful Life Mu Annual Oper + Operating • Emplo	Capital opera	operating expenditures, capital costs, useful file, employment multipliers	operating expenditures, capital costs, useful file, employment multipliers	cperating expenditures, capital costs, useful ille, employment multipliers	operating expenditures, capital costs, useful life, employment multipliers	operating expenditures, capital costs, useful ille, employment multipliers
	GSP Impacts							
	Cost of politrion, accidents, fatalities and lost time per ton mile		Avg wege posted ey posted ey actual spacifications accidents (statifies; cost/actal cost of all politrion, miles	Avg wage; posted speed, actual speed, accidents, fatalities; cost/acident; cost/atality & cost of air poliution, ton miles	Avg wage; posted speed, actual speed, accidents, fatalities; cost/arality & cost of air pollution, ton miles	Avg wage; posted speed, actual speed, accidents, fatalities; cost/accident; cost of air poliution, ton miles	Avg wage; posted speed, actual speed, accidents, fatalities; cost/accident; cost/atality & cost of air pollution, ton miles	Avg wage; posted speed actual speed, accidents, fatelities; cost/atelity a cost of air politution, ton
Salety	Accidents	Accidents / ton mile	Accident ton miles	Accidents, Ion miles	Accidents, ton miles	Accidents, for miles	Accidents, ton miles	Accidents, ton miles
Quality of Life Availabi	Availability	Frequency				Schedules	Schedules	Schedules
	Restrictions		Weight restricts height restricts width re	Weight restrictions, height restrictions, width restrictions	N/A	Weight restrictions	Double-stack constraints, width restrictions	W/A

* N/A - Not Applicable